

**8th IWPCTM Program Schedule**  
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Experimental Posters	Computational Posters	Theoretical Posters
<p>Experimental Investigation of the Heavy and Light Media Separation in the Rayleigh-Taylor Turbulence Zone at Different Atwood Numbers (E2)  <i>Yu. A. Kucherenko, S. I. Balabin, R. I. Ardashova, A. P. Pylaev, O. E. Kozelkov, and V. D. Murzakov (Russian Federal Nuclear Center - VNIITF)</i></p>	<p>Modes' Interaction on Nonlinear Stage of Richtmyer-Meshkov Instability Evolution (C1)  <i>V. I. Anisimov and A. V. Polionov (Russian Federal Nuclear Center-VNIITF)</i></p>	<p>Nonlinear Asymptotic Solutions to RT and RM Problems for Fluids with Close Densities (T2)  <i>S. I. Abarzhi (State University of New York at Stony Brook)</i></p>
<p>Experimental Investigation into Influence of Stabilizing Properties of Transitional Layers Upon the Turbulent Mixing Evolution (E3)  <i>Yu. A. Kucherenko, S. I. Balabin, R. I. Ardashova, O. E. Kozelkov, A. V. Dulov, and I. A. Romanov (Russian Federal Nuclear Center - VNIITF)</i></p>	<p>Application of kE-Model for the Description of an Atmospheric Surface Layer (C2)  <i>M. G. Anuchin, V. E. Neuvezhayev, and I. E. Parshukov (Russian Federal Nuclear Center-VNIITF)</i></p>	<p>Turbulent Mixing in RTI as Order-Disorder Process (T3)  <i>S. I. Abarzhi (State University of New York at Stony Brook)</i></p>
<p>Mixing Between Two Compressing Cylinders (E5)  <i>S. H. Batha, K. W. Parker, C. W. Barnes, A. M. Dunne, N. E. Lanier, G. R. Magelssen, T. J. Murphy, S. Rothman, J. M. Scott, and D. Youngs (Los Alamos National Laboratory and Atomic Weapons Establishment)</i></p>	<p>Computational Modeling of Low-Mach-Number High-Atwood-Number Turbulent Mixing (C4)  <i>Wm. T. Ashurst and A. R. Kerstein (Sandia National Laboratories)</i></p>	<p>A New Turbulent Two-Fluid RANS Model for KH, RT, and RM Mixing Layers (T4)  <i>P. Bailly and A. Llor (Commissariat à l'Energie Atomique)</i></p>

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Experimental Posters	Computational Posters	Theoretical Posters
<p>Development of a Method for Studying the Interaction between Shock Wave and a Flame Front (E6)  <i>M. Bliznetsov, V. Dudin, S. Gerasimov, L. Houas, G. Jourdan, and A. Logvinov (Russian Federal Nuclear Center - VNIIEF, SarPTI, IUSTI/CNRS)</i></p>	<p>Numerical Simulation of Mode Coupling in Laser-Driven Rayleigh-Taylor Instability Experiments (C9)  <i>R. Darlington and K. Budil (Lawrence Livermore National Laboratory)</i></p>	<p>Super-Exponential Rayleigh-Taylor Flow (T5)  <i>R. E. Breidenthal (University of Washington)</i></p>
<p>Design of Flyer-Plate-Driven Compressible Turbulent Mix Experiments (E9)  <i>R. P. Drake (University of Michigan)</i></p>	<p>3D Computation for Surface Perturbation Evolution of Plasma Cloud During its Expansion in Magnetic Field (C14)  <i>E. S. Gavrilova, E. V. Gubkov, V. A. Zhmailo, and Yu. V. Yanilkin (Russian Federal Nuclear Center - VNIIEF)</i></p>	<p>A General Buoyancy-Drag Model for the Evolution of the Rayleigh-Taylor and Richtmyer-Meshkov Instabilities (T11)  <i>Y. Elbaz, Y. Srebro, O. Sadot, and D. Shvarts (Ben Gurion University and Nuclear Research Center)</i></p>
<p>Growth of Perturbations on Metals Interface at Oblique Collision with Supersonic Velocity of Contact Point Motion (E11)  <i>O. B. Drennov, A. L. Mikhaylov, P. N. Nizovtsev, and V. A. Raevskii (Russian Federal Nuclear Center - VNIIEF)</i></p>	<p>Implementation of a Turbulent Mix Model in a 2D ALE Code (C17)  <i>B. Grieves (Atomic Weapons Establishment)</i></p>	<p>Stability of Diverging Shock Waves (T15)  <i>V. M. Ktitorov (Russian Federal Nuclear Center - VNIIEF)</i></p>
<p>From Linear to Turbulent Stages of the Richtmyer-Meshkov Instability Development in a Large Cross Section Shock Tube (E17)  <i>L. Houas, G. Jourdan, E. E. Meshkov, and L. Schwaederlé (Université de Provence and Russian Federal Nuclear Center - VNIIEF)</i></p>	<p>Error Estimation for Strong Shock Hydrodynamics (C18)  <i>J. W. Grove (Los Alamos National Laboratory)</i></p>	<p>Stability of Reflected From the Center Self-Similar Converging Shock Wave (T16)  <i>V. M. Ktitorov (Russian Federal Nuclear Center - VNIIEF)</i></p>

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RFNC-VNIITF Multifunctional Shock Tube to Investigate the Evolution of Instabilities in Nonstationary Gas Dynamic Flows (E20) <i>Yu. A. Kucherenko, O. E. Shestachenko, S. I. Balabin, and A. P. Pylaev</i> <i>(Russian Federal Nuclear Center - VNIITF)</i>	Localization and Spreading of Interfaces (Contact Discontinuities) in PPM and WENO Simulations of the Inviscid Compressible Euler Equations (C20) <i>Y. Gupta, N. J. Zabusky, R. Samtaney, and Y. Gulak</i> <i>(Rutgers, State University of New Jersey)</i>	Using a Turbulence Transport Approach to Study Shocks Through Polycrystalline Metal (T17) <i>R. R. Linn and F. H. Harlow</i> <i>(Los Alamos National Laboratory)</i>
Planar Laser Sheet Visualisation and Laser Doppler Velocity Measurements in Shock-Induced Turbulent Mixing Zones (E21) <i>A. Lassis, P. Montlaurent, C. Rayer, and J.-F. Haas</i> <i>(Commissariat à l'Energie Atomique)</i>	Update on Instability Modeling for the NIF Ignition Targets (C22) <i>S. W. Haan, T. Dittrich, S. Hatchett, D. Hinkel, M. Marinak, D. Munro, O. Jones, S. Pollaine, and L. Suter</i> <i>(Lawrence Livermore National Laboratory)</i>	Evolution of Arbitrary Perturbations in the Richtmyer-Meshkov Instability (T20) <i>K. O. Mikaelian</i> <i>(Lawrence Livermore National Laboratory)</i>
Hydrodynamic Instabilities at a Shock Accelerated Bubble Gas-Gas Interface (E22) <i>G. Layes, G. Jourdan, P. Roualdes, and L. Houas</i> <i>(IUSTI and Centre d'Etudes de Gramat)</i>	Pillars of Creation (C23) <i>J. O. Kane, D. D. Ryutov, B. A. Remington, S. G. Glendinning, J. Nash, M. Pound, and D. Arnett</i> <i>(Lawrence Livermore National Laboratory, University of Maryland, and University of Arizona)</i>	Statistical Mechanics Large Scale Model for the Evolution of the Multi-Mode Kelvin Helmholtz Instability (T22) <i>A. Rikanati, U. Alon, and D. Shvarts</i> <i>(Nuclear Research Center, Ben-Gurion University, and Weizmann Institute of Science)</i>
Experimental and Numerical Study of Shock Wave-Bubble Interaction (E23) <i>K. Levy, O. Sadot, D. Oron, Y. Srebro, Y. Elbaz, A. Josef-Hai, G. Ben-Dor, and D. Shvarts</i> <i>(Ben-Gurion University and Nuclear Research Center, Negev)</i>	Computational Modeling of Two-Shell Cylindrical Implosions with Mix (C28) <i>K. W. Parker, A. M. Dunne, S. Rothman, D. Youngs, C. Barnes, S. H. Batha, N. E. Lanier, G. R. Magelssen, T. J. Murphy, and J. M. Scott</i> <i>(Atomic Weapons Establishment and Los Alamos National Laboratory)</i>	Compressible MHD Turbulence in Strongly Radiating Molecular Clouds in Astrophysics (T25) <i>D. D. Ryutov and B. A. Remington</i> <i>(Lawrence Livermore National Laboratory)</i>

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<p>Laser-Driven Near Isentropic Compression of an Aluminum Flyer Plate (E24)  <i>K. T. Lorenz, D. Kalantar, J. Edwards, J. D. Colvin, and B. Remington (Lawrence Livermore National Laboratory)</i></p>	<p>Influence of Turbulent Mixing Zone on Growth of Local Perturbation in Environments of Rayleigh-Taylor Instability (Numerical Simulation) (C30)  <i>V. A. Raevski, A. N. Sinitina, and Yu. V. Yanilkin (Russian Federal Nuclear Center - VNIIEF)</i></p>	<p>Single-Velocity, Multi-Component Turbulent Transport Models for Interfacial Instability-Driven Flows (T26)  <i>O. Schilling (Lawrence Livermore National Laboratory)</i></p>
<p>Single-Mode Incompressible Richtmyer-Meshkov Instability Experiments (E26)  <i>C. E. Niederhaus and J. W. Jacobs (NASA Glenn and University of Arizona)</i></p>	<p>A Statistical Comparison of Gas Cylinder Experiments with Their Simulation (C31)  <i>W. J. Rider, J. R. Kamm, and C. A. Zoldi (Los Alamos National Laboratory)</i></p>	<p>Analytic Nonlinear Growth of a Single-Mode Richtmyer-Meshkov Instability (T31)  <i>M. Vandenboomgaerde (Commissariat à l'Energie Atomique)</i></p>
<p>Modeling Laser Material Strength Experiments (E29)  <i>S. Pollaine, D. Kalantar, B. Remington, J. Belak, J. D. Colvin, J. Edwards, R. Minich, K. O. Mikaelian, K. T. Lorenz, S. V. Weber, L. G. Wiley, D. Paisley, A. Hauer, J. S. Wark, A. Loveridge, A. M. Allen, T. R. Boehly, and M. A. Meyers (Lawrence Livermore National Laboratory, Los Alamos National Laboratory, Oxford University, University of Rochester, and University of California, San Diego)</i></p>	<p>A Mix-Model for One-Dimensional Simulations of Laser-Driven Implosion Experiments (C36)  <i>D. Souffland and F. Renaud (Commissariat à l'Energie Atomique)</i></p>	<p>Pattern Detection, Compression and Denoising of RT Mix Data Using Discrete Wavelet Transform (T39)  <i>B. B. Afeyan, P. Ramaprabhu, and M. J. Andrews (PolyMath Research Incorporated and Texas A &amp; M University)</i></p>

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<p>Experiments and Simulations of Instabilities in a Shock-Accelerated Gas Cylinder  (E30)  <i>K. Prestridge, C. A. Zoldi, P. Vorobieff, P. M. Rightley, and R. F. Benjamin</i>  <i>(Los Alamos National Laboratory, State University New York, Stony Brook, and University of New Mexico)</i></p>	<p>Turbulent Diffusion in Solar Type Star  (C39)  <i>N. Toqué</i>  <i>(University of Montreal)</i></p>	
<p>Experimental Study of the Interaction of a Strong Shock with a Spherical Density Inhomogeneity  (E34)  <i>H. F. Robey, T. S. Perry, R. I. Klein, J. A. Greenough, J. O. Kane, and T. R. Boehly</i>  <i>(Lawrence Livermore National Laboratory, University of California, Berkeley, Rochester University)</i></p>	<p>Recent Computational Simulations of Rayleigh-Taylor Mix Layer Growth with a Multi-Fluid Model  (C40)  <i>E. Vold</i>  <i>(Los Alamos National Laboratory)</i></p>	
<p>Turbulent Transition in a High Reynolds Number, Rayleigh-Taylor Unstable Plasma Flow  (E35)  <i>H. F. Robey, Y. K. Zhou, A. C. Buckingham, P. Keiter, B. A. Remington, and R. P. Drake</i>  <i>(Lawrence Livermore National Laboratory and University of Michigan)</i></p>	<p>An Efficient and High Resolution Solver for the Two-Dimensional Numerical Simulation of the Richtmyer-Meshkov Instability  (C41)  <i>S. P. Wang, M. H. Anderson, J. G. Oakley, and R. Bonazza</i>  <i>(University of Wisconsin-Madison)</i></p>	

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<p>Measurements Within a Richtmyer-Meshkov Mixing Zone using a Triple Hot Wire Probe Technique (E37)  <i>L. Schwaederlé, G. Jourdan, L. Houas, and J.-F. Haas</i>  <i>(IUSTI and Commissariat à l'Energie Atomique)</i></p>	<p>ALE Simulations of Turbulent Rayleigh-Taylor Instability in 2-D and 3-D (C42)  <i>S. V. Weber, G. Dimonte, and M. M. Marinak</i>  <i>(Lawrence Livermore National Laboratory)</i></p>	
<p>Experimental Study into Evolution of Gravitational Turbulent Mixing of Gases at the Multifunctional Shock Tube (E38)  <i>Yu. A. Kucherenko, O. E. Shestachenko, Yu. A. Piskunov, E. V. Sviridov, V. M. Medvedev, and A. I. Baishev</i>  <i>(Russian Federal Nuclear Center - VNITF)</i></p>	<p>Preliminary Results of DNS and LES Simulations of Self-Similar Variable Acceleration RT-Mixing Flows (C47)  <i>D. L. Youngs, X. Silvani, J. Magnaudet, and A. Llor</i>  <i>(Atomic Weapons Establishment, Institute de Mécanique des Fluides de Toulouse, and Commissariat à l'Energie Atomique)</i></p>	
<p>Doubly-Shocked Richtmyer-Meshkov Instability Experiments at Nova (E41)  <i>D. J. Ward, K. S. Budil, T. A. Peyser, B. A. Remington, P. L. Miller, R. J. Wallace, H. Louis, and A. Demiris</i>  <i>(Lawrence Livermore National Laboratory)</i></p>	<p>Rapid Turbulization Arising from Vortex Double Layers in Interactions of "Complex" Blast Waves and Cylindrical and Spherical Bubbles (C49)  <i>S. Zhang, Y.-G. Kang, K. Nishihara, N. J. Zabusky, and H. Kim</i>  <i>(Rutgers University and Kwangju Institute of Science and Technology)</i></p>	

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<p>Evolution of the Mixing Zone of Different Densities Gases Being Interaction to Compression Waves (E43)  <i>S. G. Zaytsev, V. V. Krivets, I. M. Mazlin, S. N. Titov, E. I. Chebotareva, V. V. Nikishin, V. F. Tishkin, S. Bouquet, and J.-F. Haas</i>  <i>(Krzhizhanovsky Power Engineering Institute, Institute of Mathematical Modeling, and Commissariat à l'Energie Atomique)</i></p>	<p>Turbulent Flow Simulations of Two Fluids Moving with Different Laws of Acceleration (C51)  <i>V. I. Kozlov, A. N. Razin, and I. V. Saphzhnikov</i>  <i>(Russian Federal Nuclear Center - VNIIEF)</i></p>	
<p>Studies of Rayleigh-Taylor Instability in Aluminum Under Shock-Wave and Shock Less Loading (E44)  <i>A. Lebedev, P. Nizovtcev, and V. Raevsky</i>  <i>(Russian Federal Nuclear Center - VNIIEF)</i></p>	<p>The Behavior of Velocity Variance Resulting From Turbulent Mixing Zone-Shock Interaction (C52)  <i>V. I. Kozlov and A. N. Razin</i>  <i>(Russian Federal Nuclear Center-VNIIEF)</i></p>	
<p>Ablative Rayleigh-Taylor Instability at Short Wavelengths (E45)  <i>H. Azechi, T. Sakaiya, M. Nakai, H. Shiraga, K. Shigemori, N. Miyanaga, M. Nishikino, S. Fujioka, Y. Tamari, H. Nagatomo, A. Sunahara, and H. Takabe</i>  <i>(Osaka University and Rutgers University)</i></p>	<p>An Assessment of Multi-Velocity Versus Single Velocity in a Multi-Component Model of Turbulent Mixing (C53)  <i>D. Eliason, W. Cabot, and Y. Zhou</i>  <i>(Lawrence Livermore National Laboratory)</i></p>	

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	Mixing due to the Rayleigh-Taylor Instability (C55) A. M. Dimits (Lawrence Livermore National Laboratory)	
	Mixing due to the Rayleigh-Taylor Instability (C57) A. Miles, J. Edwards, and G. Glendinning (Lawrence Livermore National Laboratory and University of Maryland)	